



Fibre-optic assemblies

Plastic fibre-optics

General data

Detection mode: diffuse mode
 Temperature range: -30 °C ... +70 °C
 Bending radius: $\varnothing 2,2: \geq 25$ mm
 $\varnothing 1: \geq 12$ mm
 Material cable housing: polyethylene

Plastic fibres are supplied with cutter and bush kits

Dimensions [mm]

Type

Ident number

| | | |
|--|---|---|
| | <p>PBP46U</p> | <p>39 114 00</p> |
| | <p>PBT46U PBT46UHT1²⁾ PBT46UHF³⁾</p> | <p>39 080 30 42 799 30 51 784</p> |
| | <p>PBT66U</p> | <p>30 399 82</p> |
| | <p>PBP26U</p> | <p>39 154 00</p> |
| | <p>PBP16U</p> | <p>30 399 92</p> |
| | <p>PBT26U</p> | <p>39 134 00</p> |
| | <p>PBT16U</p> | <p>30 428 22</p> |
| | <p>PBT46UC</p> | <p>39 216 00</p> |

¹⁾ Bendable probes should not be bent less than 12 mm from each extremity, bending radius ≥ 12 mm.

²⁾ Temperature range for plastic fibre models HT: -30 °C...125 °C.

³⁾ Minimum bending radius for plastic fibre models HF: 1 mm.

Plastic fibre-optics

| General data | Detection mode: opposed Temperature range: -30 °C ... +70 °C Bending radius: ø 2,2: ≥ 25 mm ø 1: ≥ 12 mm Material cable housing: polyethylene | Dimensions [mm] | Type | Ident number |
|---|--|-----------------|---|-------------------------------------|
| Plastic fibres are supplied with cutter and bush kits | | | PIP46U (supplied in pairs) | 39 152 00 |
| | | | PIT46U PIT46UHT1 ²⁾ PIT46UHF ³⁾ (supplied in pairs) | 39 250 00 30 428 04 30 517 83 |
| | | | PIT66U (supplied in pairs) | 30 398 99 |
| | | | PIP26U (supplied in pairs) | 39 372 00 |
| | | | PIP16U (supplied in pairs) | 30 350 44 |
| | | | PIT26U (supplied in pairs) | 39 138 00 |
| | | | PIT16U (supplied in pairs) | 30 399 83 |
| | | | PIT46UC (supplied in pairs) | 39 373 00 |

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Plastic fibre-optics

General data

| | |
|------------------------|--------------------------------|
| Detection mode | diffuse mode |
| Temperature range | -30 °C ... +70 °C |
| Bending radius | ø 2,2: ≥ 25 mm ø 1: ≥ 12 mm |
| Material cable housing | polyethylene |

Plastic fibres are supplied with cutter and bush kits

Dimensions [mm]

Type

Ident. number

| | | |
|--|---|---|
| | <p>PBCT23T D12 only</p> | <p>30 391 46</p> |
| | <p>PBFM1X43T D12 only</p> | <p>30 383 28</p> |
| | <p>PBF46U PBF46UHF²⁾</p> | <p>30 260 35 30 517 86</p> |
| | <p>PBPMSB36U</p> | <p>30 387 11</p> |
| | <p>PBR1X326U</p> | <p>30 399 87</p> |
| | <p>PBPFB26UMB</p> | <p>30 391 16</p> |
| <p>Bifurcated unterminated fibres</p> | <p>9,15 m 18,3 m</p> <p>2 x 1 mm 2 x 1 mm</p> | <p>PBU430U PBU460U</p> <p>39 370 00 39 371 00</p> |

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Plastic fibre-optics

General data

| | |
|------------------------|--------------------------------|
| Detection mode | opposed |
| Temperature range | -30 °C ... +70 °C |
| Bending radius | ø 2,2: ≥ 25 mm ø 1: ≥ 12 mm |
| Material cable housing | polyethylene |

Plastic fibres are supplied with cutter and bush kits

| | | |
|-----------------|------|--------------|
| Dimensions [mm] | Type | Ident number |
|-----------------|------|--------------|

| | | |
|--|--|--|
| | <p>PIF46U PIF46UHF²⁾ PIF46UHT1³⁾ (supplied in pairs)</p> | <p>39 137 00 30 517 85 30 517 68</p> |
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| | <p>PIA26U (supplied in pairs)</p> | <p>39 217 00</p> |
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| | <p>PIPS26U (supplied in pairs)</p> | <p>30 350 41</p> |
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| | <p>PIR1X166U (supplied in pairs)</p> | <p>30 391 52</p> |
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| | <p>PITP16U (supplied in pairs)</p> | <p>30 399 93</p> |
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| | <p>PIFM1X46U (supplied in pairs)</p> | <p>30 386 36</p> |
|--|--|------------------|

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|--|--|---|--|
| <p>Bifurcated unterminated fibres</p> | <p>18,30 m 1 x 0,5 mm 9,15 m 1 x 1,0 mm 18,30 m 1 x 1,0 mm 9,15 m 1 x 1,5 mm 18,30 m 1 x 1,5 mm</p> | <p>PIU260U PIU430U PIU460U PIU630U PIU660U</p> | <p>39 221 00 30 267 51 39 374 00 30 399 97 30 399 98</p> |
|--|--|---|--|

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²⁾ Minimum bending radius for plastic fibre models HF: 1 mm.
³⁾ Temperature range for plastic fibre models HT: -30 °C...125 °C.



Fibre-optics: accessories

| | Dimensions [mm] | Type | Ident number |
|--|-----------------|---|--|
| <p>L9M8: Glass lens with anodised blue aluminium housing, used to extend the range of opposed mode fibre-optic systems.</p> <p>L10M8: Glass lens with anodised red aluminium housing, used with bifurcated threaded fibres primarily for register mark sensing. The light is focused to a point as small as 0,8 mm when used with a 1,5 mm bundle.</p> <p>Temperature range: 315 °C max.</p> | | Lenses for glass fibres L9M8 L10M8 | 37 747 00 37 748 00 |
| <p>To increase the range of an opposed mode sensor.</p> <p>Material: lens glass housing L16FM8 Delrin max. 105 °C L16FALM8 anodised alu. max. 315 °C L16FSSM8 stainless steel max. 480 °C</p> | | Lenses for glass fibres L16FM8 L16FALM8 L16FSSM8 | 37 754 00 37 755 00 37 756 00 |
| <p>Used for liquid level sensing. When used with a bifurcated threaded fibre, the light is reflected back to the sensor when the probe is not in the liquid. This glass version is used when chemical and acid resistance is required. Fixing collar is in stainless steel.</p> <p>Temperature range: -140 °C...+250 °C.</p> | | Quartz glass probe TGRM8MM (stainless steel) for glass fibres | 37 750 00 |
| <p>Used for liquid level sensing. Polypropylene housing, Quartz glass probe.</p> <p>Temperature range: -30 °C...+70 °C</p> | | Probe TGR3/8MPFMQ for plastic fibre-optics | 30 232 68 |
| | | Lenses for plastic fibre-optics L2 L2RA (right-angle) L4C6 (focal distance 6 mm) L4C20 (focal distance 20 mm) | 37 496 00 37 496 01 30 415 17 30 686 29 |
| <p>Lens to increase the range of opposed mode plastic fibres. The lens is field mountable on the fibre with a shrink fitting.</p> <p>Only suitable for fibre types PIU4...U.</p> | | Lenses for plastic fibre-optics L08FP | 37 749 00 |
| <p>Plastic fibre-optic cutter kit. Each kit contains 10 cutters and 40 bushings: PFK20 for fibre diameters of 0,5 mm, PFK40 for fibre diameters of 1 mm.</p> <p>PFC-1-25 contains 25 cutters only.</p> | | Cutter for plastic fibre-optics PFK20 PFK40 PFC-1-25 | 37 889 00 37 727 00 30 340 94 |